MULTIMEDIA UNIVERSITY ®

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2015/2016

PIM0245 – INTRODUCTION TO MULTIMEDIA TECHNOLOGY

(Foundation in Information Technology)

29 FEBRUARY 2016
2.30 p.m – 4.30 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **FOUR** pages (excluding the cover page).
2. Answer **SEVEN** out of **EIGHT** questions. Marks will be given for the first seven questions answered.
3. Write your answers in the Answer Booklet provided.

Instructions: Answer **SEVEN** out of **EIGHT** questions. Write your answers in the Answer Booklet.

QUESTION 1 [10 Marks]

a. Multimedia is the use of computers to present text, graphics, video, animation and sound in an integrated way.

i. Give **FOUR (4)** aspects where multimedia could be used.

(2 marks)

ii. While multimedia offers many advantages, it also has its disadvantages. Give **THREE (3)** disadvantages for multimedia users and **THREE (3)** disadvantages for multimedia developers.

(6 marks)

b. Explain any **ONE (1)** type of resolution with regards to graphics.

(2 marks)

QUESTION 2 [10 Marks]

a. Multimedia projects are mostly developed in teams. What can be done to promote team effectiveness? Give **FOUR (4)** suggestions.

(4 marks)

b. The following questions refer to the multimedia development process.

i. Building a multimedia team falls under **Stage 1** in the multimedia development process. List and explain in brief **TWO (2)** roles a member can hold in a multimedia team.

(4 marks)

ii. Testing is done to ensure a multimedia product is bug free, accurate, operationally and visually on target, and achieving the objective or target. Explain the **ONE (1)** phase of testing conducted in **Stage 3** of the multimedia development process.

(2 marks)

Continued...

QUESTION 3 [10 Marks]

a. What is kerning and leading? Why is it important to be mindful when using these typesetting? You may illustrate your answer if it can help to improve your explanation.

(4 marks)

b. Below are two different typefaces. How do they differ from one another?

Monotype Corsiva	**Verdana**

(4 marks)

c. Multimedia application is not always good at conveying extra information as compared to spoken text.

i. What can a spoken text convey that a written text cannot?

(1 mark)

ii. When might written text be better than spoken text?

(1 mark)

QUESTION 4 [10 Marks]

a. Another element that is often used in a multimedia application is audio which comprises of spoken words, voice and music. Most audio nowadays are stored in digital format. List **FOUR (4)** advantages of using digital over analog audio.

(4 marks)

b. Jason is listening to a stereo song from a CD player. The duration of the song is 1.5 minutes and based on 16 bit resolution. Estimate the size of this audio file and write your answer in MB.

(6 marks)

QUESTION 5 [10 Marks]

Google Search and Google Earth are examples of a multimedia product. Based on these examples, answer the following questions.

a. In which type or category of multimedia product that Google Search and Google Earth fall under?

(1 mark)

Continued...

b. List **FOUR (4)** characteristics of the multimedia product stated in (a).

(4 marks)

c. List and explain **TWO (2)** users perspective that need to be considered when evaluating any multimedia products.

(4 marks)

d. Animation can be rendered in three different ways by using appropriate software and techniques. Name **ONE (1)** animation spaces that can be used to create animation.

(1 mark)

QUESTION 6 [10 Marks]

Nowadays, due to the evolution of technologies, people start to communicate and convey information or messages through multimedia applications especially by using videos.

a. Video signals that are transmitted are not easily interchangeable. There are four broadcasting and video standards used around the world. List **FOUR (4)** video standards available. Identify which one of the standards is used in Malaysia and explain briefly.

(4 marks)

b. The file size and quality of a digital video are dependent on certain characteristics required in a production of a video. Discuss any **TWO (2)** of the characteristics.

(3 marks)

c. Alan is required to design a poster (in a form of an image) to promote MMU's Chess Club to his fellow course mates. The width of the poster is 800 pixels and the height is 600 pixels. The color depth used for this poster is 16 bit. Estimate the total of memory space that might be consumed by this poster. (Write your answer in KB).

(3 marks)

QUESTION 7 [10 Marks]

a. In the development of a multimedia application, multimedia authoring tools are used to provide the important framework for organizing and editing elements of the application. Explain briefly **THREE (3)** different categories or metaphors of authoring tools.

(6 marks)

Continued...

b. Authoring tools are constantly improved with new features being added to increase the performance. Therefore, it is important for the developer to know the features included in the software and choose the best software to do the job. Explain briefly the features listed below:

i. Editing Features
ii. Playback Features
iii. Delivery Features
iv. Cross-Platform Features

(4 marks)

QUESTION 8 [10 Marks]

a. Andy has been assigned to develop a multimedia kiosk to be used as a guideline to show location in his community. The kiosk will allow users with an account to enter the name of any location and the kiosk will display the information about the location together with a map on how to get to the location. The kiosk should also have the ability to print the map for the users. Based on this scenario, answer the below questions:

i. Suggest the **MOST** suitable navigational structure to be used for the above mentioned scenario. Give **ONE (1)** reason to support your answer.

(1.5 marks)

ii. Draw the navigation map to support your answer in 8(a).

(6.5 marks)

iii. Why mapping the structure of a multimedia product through navigation maps is important?

(2 marks)

End of Paper